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Figure



#### Figure 2a

CCCCGACGCTCGCCGCCCGCCCAACGCCACGCCCCGCGCTCGTCGTCGT TCGACACGCAGGAGGCCGGGATTCGGCTGGTGCACGCGCTGCTGCGCGGG AGGCCGTGCAGCAGGAGAACCTCTCCGCCGCGGAGGCGCTGGTGAAGCAGATAC CCTTGCTGGCCGCGTCCCAGGGCGCGCGATGCGCAAGGTCGCCGCCTACTTCGG CGAGGCCCTCGCCGCGCGCGCTCTTCCGCCCGCAGCCGGACAGCTCCCTC CTCGACGCCCCTTCGCCGACCTCCTCCACGCGCACTTCTACGAGTCCTGCCCCTA CCTCAAGTTCGCGCACTTCACCGCCAACCAGGCCATCCTGGAGGCGTTCGCCGGC TGCCGCCGCGTGCACGTCGACTTCGGCATCAAGCAGGGGATGCAGTGGCCC CGGCGTCGGCCCCCGCAGCCGGACGACGCCCTGCAGCAGGTGGGCTG GAAGCTCGCCCAGTTCGCGCACACCATCCGCGTCGACTTCCAGTACCGCGGCC TCGTCGCCGCCACGCTCGCGGACCTGGAGCCGTTCATGCTGCAGCCGGAGGGCG AGGAGGACCCGAACGAAGANCCCGANGTAATCGCCGTCAACTCAGTCTTCGAGA TGCACCGGCTGCTCGCGCAGCCCGGCGCCCTGGAAAAGGTTCTTGGGCACCGTGC GCCCCGTGCGGCCCAGAATTCNTCACCGTGGTGGAAACAGGAGGCAAATCACA ACTCCGGCACATTCCTGGACCGCTTCACCGAGTCTCTGCACTACTACTCCACCAT GTTCGATTCCCTCGAGGGCGGCAGCTCCGGCGGCGCCCATCCGAAGTCTCATCG GGGGCTGCTGCTGCCGCCGCCGCCGGCACGGACCAGGTCATNTCCGAGGTGT ANCGCCACGAGACGCTGGGCCAGTGGCGGAACCGCCGGGTTCG AGACCGTCCACCTGGGCTCCAATGCCTACAAGCAGGCGANCACGCTGCTGGCGC TCTTCGCCGGCGGCGAACGGCTACANGTGGAAGAAAAGGAAGGCTGCCTGACGC TGGGGTTGCACACNCCCCCTGATTGCCACCTCGGCATGGCGCCTGGCCGGGCCG TGATCTCGCGAGTTTTGAACGCTGTAAGTACACATCGTGAGCATGGAGGACAACA AGAAGAAGAAGCTAAATGTCATGTCAGTGAGCGCTGAATTGCAGCGACCGGCTA CGACGAACTCCGAGCCGACCACCACCGGCATGTAGTAATGTAATCCCTTCTTCGT TCCCAGTTCTCCACCGCCTCCATGATCACCCGTAAAACTCCTAAGCCCTATTATTA CTACTATTATGTTTAAATGTCTATTATTGCTATGTGTAATTCCTCCAACCGCTCAT AAAAA

# Figure 2b(1)

# Figure 2b(2)

#### Figure 2b(3)

# Figure 2b(4)

GGCTNCCNCGTGCACGTCGTCGACTTCGGCATCAAGCATGGGATGCANTGGC NCGNACTTCTCCANGCCCTCGCCCTCCGTCCCGGCGCCCTCCTCCTTCCGCCTC ACCGGCGTCGGCCCCCGCAGCCGGACGAGACCGACGCCCTGCANCAGGTGGGC TGGAAGCTCGCCCAGTTCGCGCACACCATCCGCGTCGACTTCCANTACCGTGGCC TCGTCGCCGCCACGCTCGGACCTGGAGCCGTTCATGCTGCANCCGGAGGGCGA GGAGGACCCGAACGACGGAGCCCGAGGTAATCGCCGTCAACTCAGTCTTCGAGA TGCACCGGGCTGCTCNCGCANCCCGGCGACNCTGGAANAA

Figure 2b(5)

CAAGANGCTAATCACAACTCCGGCACATTCCTGGACCGCTTCACCGAGTCTCTGC
ANTACTACTCCACCATGTTCGATTCCCTCGAGGGCGCAGCTCCGGCGGCGCCC
ATCCGAAGTCTCATCGGGGGCTGCTGCTGCTCCTGCCGCCGCCGCCACGGACCAT
GTCATGTCCGAXGTGTACCTCGGCCGGCAGATCTGCAACGTGGTGGCCTGCGAGG
GGGCGGAGCGCACANTANCGCCACGCAGACNCTGGGCCAGTGGCGTGAACCGGC
TGGGCAACGCCNGGTTCANNNNCCGTCCACCTGGGCTCCAATGCCTACAATCAN
GCNNNCACGCTGCTGGCGCCTCTTCGCCC

# Figure 2b(6)

#### Figure 2b(7)

#### Figure 2b(8)

Figure 2b(9)

Figure 2b(10)

GGACGACCTCCGAGCCGACCACCACCGGCATGTAGTAATGTAATCCCTTCTT
CNTTCCCAGTNCTCCACCGCCTCCATGATCACCCGTAAAACTCCTAAGCCCTATT
ATTACTACTATTATGTNTAANTGTCTATTATTGCTANGTGTAATTCCTCCAACCGC
TCATATCAAAATAAGCACGGGCCGGACTTTGTTANCAGCTCCAATGAGAATGAA
ATGAATTTTGTACGCAAGGCACGTCCAAAACTGGGCTGAGCTTTGTTCTGTTCTG
TTATGTTCATGGTGCTCACTGCTCTGATGAACATGATGGTGCCTCCAATGGTGGC
TTTGCAATTGTTGAAACGTTTGGCTTGGGGGACTTGNGTGGGTGGGTGCATGGGG
ATGAATATTCACATCNCCGGATTAAAATTAAGCCATCCCGTTGGCCGTCCTTTGA
ATANCTTGCCCNAAACGAAATTTCCCCCNATC

Figure 2b(11)

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Figure 2b(12)

CGGCGCCCCGTGGCGCATGGGCTCGTCCGAGGACNAGATGATGGTGTCGGCG GCGGCGGGGANGGGGATGATGTGGACTATCTGCTGGCGCGCTCGGGTACAG GTGCGCGCCTCCGACAGGCGGAGCCCGCGCATAACTGGAGCCGCTCGAGATGGC CNTGGGGATNGGCGCCNTGGGCNCCNGCGCCTCCCCCG

Figure 2b(13)

TGGNGCTCGGGTGNCCCGTGCGCGCCTCCGACATGGCGGGACGTGGCGCAGAAC CCGACGACAGCTTCGCCACCCACCTCGCCACGGACACCGGCACACACCCCACCG ACCTGTCGTCTTGGGTCGAGAGCATGCTGTCGGATCTCNACGCGCCNCCGNCGCC **CCTCCCGCCCGC** 

# Figure 2c(1)

ANNTTGTNCNNNNTACATCCCATGNGCCGCGCNATGCTNAAGGTCGCCGCCTACT CCCTCCTCGACGCCGCCTTCGCCGACCTCCTCCACGCGCACTTCTACGAGTCCTGC CCCTACCTCAAGTTCGCGCACTTCACCGCCAACCAGGCCATCCTGGAGGCGTTCG CCGGCTGCCGCGTGCACGTCGTCGACTTCGGCATCAAGCAGGGGATGCAGT CTCACCGGCGTTCGGCCCCCGCAGCCGGACGANAACGACGCCCTG

# Figure 2c(2)

NTTCCCCGGCAGTTAAAAGCNTCCACTTCTTCCACCGTCACGGCCAGCGGCGGNT ACTTNGATCTCCCGCCCTCAGTCGACTCCTCCAGCAGCATCTACGCGCTGCGGCC GATCCCCTCCCGGCCGCCGCCGACGCCGCCGACCTGTCCGCCGACTCCGTG CGGGATCCCAAGCGGATGCGCACTGGCGGGAGCACCTCGTCGTCATCCTCCT CATANTCGTCTCTCGGTGGGGGCGCCAGGAGCTCTGTGGTGGAGGCNGCCCCGCC GGTCGCGGCCGCGCCAACGCGACGCCCGCGCTGCCGGTCGTCGTCGACAC GCAGGAGGCCGGATTCGGATGGTGCACGCGCTGNTGGCGTGCGCGGAGGCCGT GNAAGCAGTTNGAAGGGCCTNCGCCGTGNATNNCGCAACAANNNGGAAGNCCN

# Figure 2c(3)

TTTTGAACGCTGTAAGTACACATCGTGAGCATGGAGGACAACACAGCCCCGGCG GCCGCCCGGCTCTCCGGCGAACGCACGCACGCACGCACTTGAAGAAGAAGAAG CTAAATGTCATGTCAGTGAGCGCTGAATTGCANCGACCGGCTACGATCGATCGG GANCCGACCACCGGCATGTAGTAATGTAATCCCTTCTTCGTTCCCAGTTTCTC CACCGCCTCCATGATCACCCCGTAAAACTCCTAAGCCCTATNNNTTACTACNATT AATGTTTTAAANTGTTCTANTAATTGCTATGNTGTTTATTNCC

#### Figure 2c(4)

TATCGAAGTAGCCGCCGCTGCCCNTGCACGGTGGAGGAGGTGGAGGCGTTGAGC TGCGGGGCGGGGGGGGGGGGGGGGGGGCGCACGTTNAGCTCCGACAGCATGCTC TCGACCCAAAACNACAGGTCGGTGGGGTTGTAGTGCACGGTGTCCGTGGCGAGG GGGTGGCNAANCTGTCGTCAGGGGCGCGCCCNGCGCCCACNCCGCCCATCCCCA TGGCCATCTCGANCTGCTCCAGCTTCTGCGCCACTTCCNCCATGTCNGATGCGCG CNCCTTGTACCCGA

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## Figure 2c(5)

# Figure 2c(6)

# Figure 2c(7)



Figure 3a

TTTCANTTTCNTCCTTTTTTCTTCTTTTTCCAACCCCGGCCCCCNGACCCTTGGATCC AAATCCCGAACCCGCCCCAGAACCNGGAACCGAGGCCAAGCAAAAGNTTTGCGCC AATTATTGGCCAGAGATAGATAGAGAGGCGAGGTAGCTCGCGGATCATGAAGCGGG AGTACCAGGACGCCGGAGGGAGCGGCGGCGGCGGCGGCATGGGTTCGTCCGAG TGGCGGCGCTCGGGTACAAGGTGCGCGCCTCCGACATGGCGGACGTGGCGCAGAAG CTGGAGCAGCTCGAGATGGCCATGGGGATGGGCGTGGGGCGCTGGCGCCCCC TGACGACAGGTTNGCCACCCGCNGGCCGCGGACACNGTGCANTACAACCCCACNGA CNTGTCGTCTTGGGTCGAGAGCATGCTGTCGGAGCTAAANGAGCCGCNGCCGCCCC TCCCGCCCGCCCGCAGCTCAACGCCTCCACCGTCACGGGCAGCGGCGGNTACTTNG ATCTCCCGCCCTCAGTCGACTCCTCCAGCAGCATCTACGCGCTGCGGCCGATCCCCT CCCGGCCGCCGACGCCGCCGACCTGTCCGCCGACTCCGTGCGGGATCCC AAGCGGATGCGCACTGGCGGGAGCAGCACCTCGTCGTCATCCTCCTCATANTCGTCT CTCGGTGGGGGCCCAGGAGCTCTGTGGTGGAGGCNGCCCCGCCGGTCGCGGCCGC GGCCAACGCGACGCCCGCGCTGCCGGTCGTCGTCGACACGCAGGAGGCCGGGA TTCGGCTGGTGCACGCGCTGCTGGCGTGCGCGGAGCCGTGCAGCAGGAGAACCTC TCCGCCGCGGAGGCGCTGGTGAAGCAGATACCCTTGCTGGCCGCGTCCCAGGGCGG CGCGATGCGCAAGGTCGCCGCCTACTTCGGCGAGGCCCTCGCCGCCGCGTCTTCCG CTTCCGCCCGCAGCCGGACAGCTCCCTCCTCGACGCCGCCTTCGCCGACCTCCTCCA CGCGCACTTCTACGAGTCCTGCCCCTACCTCAAGTTCGCGCACTTCACCGCCAACCA GGCCATCCTGGAGGCGTTCGCCGCTGCCGCCGCGTGCACGTCGACTTCGGCAT CAAGCAGGGGATGCAGTGGCCCGCACTTCTCCAGGCCCTCGCCCTCCGTCCCGGCGG CCCTCCCTCGTTCCGCCTCACCGGCGTCGGCCCCCCGCAGCCGGACGAGACCGACGC CCTGCAGCAGGTGGGCTGGAAGCTCGCCCAGTTCGCGCACACCATCCGCGTCGACTT CCAGTACCGCGCCTCGTCGCCGCCACGCTCGCGGACCTGGAGCCGTTCATGCTGCA GCCGGAGGCGAGGACCCGAACGAAGANCCCGANGTAATCGCCGTCAACTCA GTCTTCGAGATGCACCGGCTGCTCGCGCAGCCCGGCGCCCTGGAAAAGGTTCTTGGG CACCGTGCGCCCCGTGCGGCCCAGAATTCNTCACCGTGGTGGAAACAGGAGGCAA ATCACAACTCCGGCACATTCCTGGACCGCTTCACCGAGTCTCTGCACTACTACTCCA CCATGTTCGATTCCCTCGAGGGCGGCAGCTCCGGCGCGGCCCATCCGAAGTCTCAT CGGGGGCTGCTGCTCCTGCCGCCGCCGCCGGCACGACCAGGTCATNTCCGAGGTGT CGCCACGAGACGCTGGGCCAGTGGCGGAACCGGCTGGGCAACGCCGGGTTCGAGAC CGTCCACCTGGGCTCCAATGCCTACAAGCAGGCGANCACGCTGCTGGCGCTCTTCGC CGGCGGCGAACGCTACANGTGGAAGAAAAGGAAGGCTGCCTGACGCTGGGGTTGC ACACNCCCCCTGATTGCCACCTCGGCATGGCGCCTGGCCGGGCCGTGATCTCGCGA GTTTTGAACGCTGTAAGTACACATCGTGAGCATGGAGGACAACACACCCCGGCGG CCGCCCGGCTCTCCGGCGAACGCACGCACGCACGCACTTGAAGAAGAAGAAGCTA GGGTGGTTCCGTCCGTCTGGCGTGAAGAGGTGGATGGACGACGAACTCCGAGCCGA CCACCACCGGCATGTAGTAATGTAATCCCTTCTTCGTTCCCAGTTCTCCACCGCCTCC ATGATCACCCGTAAAACTCCTAAGCCCTATTATTACTACTATTATGTTTAAATGTCTA TTATTGCTATGTGTAATTCCTCCAACCGCTCATATCAAAATAAGCACGGGCCGGACT TTGTTANCAGCTCCAATGAGAATGAATTTTGTACGCAAGGCACGTCCAAAA CTGGGCTGAGCTTTGTTCTGTTCTGTTATGTTCATGGTGCTCACTGCTCTGATGAACA TGATGGTGCCTCCAATGGTGGCTTTGCAATTGTTGAAACGTTTGGCTTGGGGGACTT GNGTGGGTGGGTGCATGGGGATGAATATTCACATCNCCGGATTAAAATTAAGCCAT CCCGTTGGCCGTCCTTTGAATANCTTGCCCNAAACGAAATTTCCCCCNATC

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DGNGM <b>DELLA</b> EGEEV <b>DELLA</b>	YN PAELYTML YN PTDXSSWV	PGDAILNOFA PSPAGATAPA	AESTRHVVLV ATPALPIVV	TYFAEALARR AYFGEALARR	KRVHVIDESM RRVHVVDEGI	EALHVEFEYR HTIRVDFQYR	VLG . V V N Q I K VLGHRAPPCG		GSNAFKOASH GSNAYKOAXT	
KKTWMMNEED DKMWVSAAAG	LSQLATETV XHPXAADTVX	SNAEYDLKAI SSIYALRPI	AAPPVAAAAN	SQIGAMRKVA SQGGAMRKVA	QAIDEAFOGK QAIDEAFAGC	EVGCKLAHLA QVGWKLAQFA	LUGRPGAIDK ULAQPGALEK	P S G Q P S E V S	GSAGFAAAHI GNAGFETVHL	532 630
G G G G G G K G S E	NVQEDD GAGAAPDRQV	YXDLPPSVDS	NG · · · · VVE GGGARSSVVE	<b>LVKQIGFLB</b> V LVKQIPLIMA	YLKFAHETAN YLKFAHETAN	PAPDNFDYGH PQPDETDAGQ	AVNSVEELHK AVNSVEEMHR	STLFDSLEGV STMFDSLEGG	etlsowrnr etleowrnr	ATSAUKLSTN ATSAURLAGP
КВ В И И И И И В С. КВ В У Д В А В В В В В В В В В В В В В В В В В	LEVMWS	NASTVTGSGG	YTTNKRLKCS SSSSSXSSL	OKENLTVAEA OQENLSAAEA	LOMHEYET CP LHAHFYES CP	PVFRLTGIGP PSFRLTGVGP	EDPNEXPXVI	DRETESLHYY	CDGPDRVERH CEGAERTXRH	MLGWHTRPLI TLGLHTXPLI
IERRGSSRIK	MADVAOKLEO	XPPLPPAPQL	KRMRTGGSDT	HALLACAEAV HALLACAEAV	SPIDHSLSDT SLLDAAFADL	QALALRPGGP QALALRPGGP	DASMLELRPS EPFWLQPEGE	ESNHNSPIFE BANHNSGTFE	LGKQICNVVA LGRQICNVVA	YRVEESDGCL LXVEEKEGCL
Gai Rht	Gai Rht	Gai Rht	Gai Rht	Gai Rht	Gai Rht	Gai Rht	<b>Gai</b> Rht	Gai Rht	Gai Rht	Gai Rht

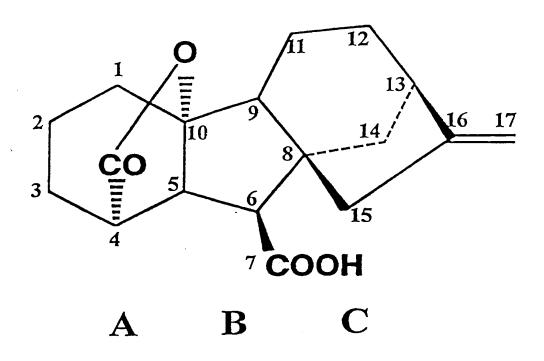
#### Figure 4a

Figure 4b

120 110 93 50 41 ALGYKVRASD ALGYKVRSSD TGYKVRSS PALPVV a w a ALEKVEGHRA æ A A HI I G S N A F K RKVAAYEGEA RKVATYEAEA ESMLSELXAP ESMLSELXAP ESMLPELXAP BAGCRRVHV Mo Finh Thru A i bikvise . v æ 4 A BOGKKRWHW MH LINE ABHW SPAGATA LPVVATA GDAILN SSIYALRPIP SSTYALRPIS NAEYDLKWIP redeseece redvesece r DXSSWV S D LSSWV A 同LY T 的百 PTANOAILEA DAMOQUENKE BMER DE A OPG VDELLA VDELLA DELLA 4 4 E LLAASOGAW FINACIGAN FTAMOATIER DY LAH E WEG CKEN Bull Kinds Ried RNRFESAGE RNRLGNAGF . ΩΩ ₹ DEG 0 2 3 G AAPPU. AAPPATCSNGWVE A G P 630 258 S T N 532 GGASROSVVE GGASROSVVE DITYTTNKRIDK XHPXAADTUX VSHLATDTVH LSQLATETVH BSCPYDKFAH GVGPPQPDET PXVIAVNSVE LHYYSTMPDS DHYYSTEPS TXRHETEON BTCPYLKFAH VAVNSVE ĠiĠĐĐAĐĐNF v ernegis on AAEALVKOIP AEALVKOI RPLIATSAW លលេស XPLIATSAW 0 x · DKMMWS R KDKWWA G KKTMWA G D L P S Y ×£ NVVACEGAER N VIOEDD × GTEDDRETES reboreses FADLEHAHEY L signific with the signification of the significant of the significan PGGPPSFRLT NVVACDEP DR <u>ច្ចាប់ បាន ១១១</u>ឧ GOD WINGWIND **ω** • ⊢ Pedera verson SEIES AEAVOOENLS XEAVOOENIS AEAVOKENLT 0 0 0 0 0 0 0 0 . o PEGEMBDPN 7 V 7 G S G C 0 A 40 · G N ٠ ۵. 0 0 0 0 0 0 0 ٠α 44 IRLVHALLAC IRLVHALLAC WRLVHALLAC LENANGNGGV LENANGNGGV LEWMMS SEVYLGROIC PALLOALALR SEVYLGKOTC 3 E S PALMOALAIR VETOEANHNS VECOESMHNS លល SELLDAA · W DADBEPFWIDO · 🖂 × 0 O D RVBB CADED A SINE LXVBB ٠£-دي SQ. SPIDH OOX R M R T G G S R M R T G G G K O X ٠ ۵. . N A O X . <u>X</u> 0 4 X N E N GGER · Œ GGE Ω o. o MADVAQK LEQ MADVAQK LEQ MADVAQK LEQ AADSARDPK AADSARDTK ATDSA iriaisi SOGLON GIKOGMON FOYRGLWAM E VRGFWAN NOIKPBIFF G TEROWX Oυ DARRVFRFRE CGPBFXFW X T L D A B B A ·B  $\mathbf{E}$ . Ei Ei Ei PLPP. APCLIPPGAAG SMICHAGE œ Ö DARR DES M AAA Wheat Rice Gai Theat Rice Gai Wheat Rice Gai Wheat Rice Gai

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# Figure 5



# Figure 6a

#### Figure 6b

RPTRPEAGGSSGGSSADMGSCKDKVMAGAAGEEEDVDELLAALGYKVRSSDMAD VAQKLEQLEMAMGMGGVSAPGAADDGFVSHLATDTVHYNPSDLSSWVESMLSELN APLPPIPPAPPAARHASTSSTVTGGGGSGFFELPAAADSSSSTYALRPISLPVVATADPS AADSARDTKRMRTGGGSTSSSSSSSSSSSGGGASRGSVVEAAPPATQGAAAANAPAVP VVVVDTQEAGIRLVHALLACAEAVQQENF

#### Figure 7a

GCCAGGAGCTCTGTGGTGGAGGCTGCCCGGCGGGCGGGCCGACGCG ACGCCCGCGCTGCCGGTCGTCGTGGTCGACACGCAGGAGGCCGGGATTCGGCTG GTGCACGCGCTGCTGCGCGCGGAGGCCGTGCAGCAGGAGAACCTCTCCGCC GCGGAGGCGCTGGTGAAGCAGATACCCTTGCTGGCCGCGTCCCAGGGCGCGCG TCCGCCGCAGCCGGACAGCTCCCTCCTCGACGCCGCCTTCGCCGACCTCCTCCA CGCGCACTTCTACGAGTCCTGCCCCTACCTCAAGTTCGCGCACTTCACCGCCAAC CAGGCCATCCTGGAGGCGTTCGCCGGCTGCCGCCGCGTGCACGTCGACTTCG GCATCAAGCAGGGGATGCAGTGGCCCGCACTTCTCCAGGCCCTCGCCCTCCGTCC CGGCGGCCTCCCTCGTTCCGCCTCACCGGCGTCGGCCCCCCGCAGCCGGACGAG ACCGACGCCCTGCAGCAGGTGGGCTGGAAGCTCGCCCAGTTCGCGCACACCATC CGCGTCGACTTCCAGTACCGCGGCCTCGTCGCCGCCACGCTCGCGGACCTGGAGC CGTTCATGCTGCAGCCGGAGGGCGAGGAGGACCCGAACGAGGAGCCCGAGGTAA TCGCCGTCAACTCAGTCTTCGAGATGCACCGGCTGCTCGCGCAGCCCGGCGCCCT GGAGAAGGTCCTGGGCACCGTGCGCCCGTGCGGCCCAGGATCGTCACCGTGGT GGAGCAGGAGGCGAATCACAACTCCGGCACATTCCTGGACCGCTTCACCGAGTC TCTGCACTACTCCACCATGTTCGATTCCCTCGAGGGCGGCAGCTCCGGCGGC GGCCCATCCGAAGTCTCATCGGGGGCTGCTGCTGCTCCTGCCGCCGCCGCCACGG ACCAGGTCATGTCCGAGGTGTACCTCGGCCGGCAGATCTGCAACGTGGTGGCCTG CGAGGGGGGGGGCCACAGAGCGCCACGAGACGCTGGGCCAGTGGCGGAACC GGCTGGGCAACGCCGGGTTCGAGACCGTCCACCTGGGCTCCAATGCCTACAAGC AGGCGAGCACGCTGCTGGCGCTCTTCGCCGGCGGCGACGGCTACAAGGTGGAGG AGAAGGAAGGCTGCCTGACGCTGGGGTGGCACACGCCCCCCTGATCGCCACCT CGGCATGGCGCCTGGCCGGGCCGTGATCTCGCGAGTTTTGAACGCTGTAAGTACA CATCGTGAGCATGGAGGACAACACAGCCCCGGCGGCCCCCGGCTCTCCGGCG AACGCACGCACGCACTTGAAGAAGAAGAAGCTAAATGTCATGTCAGTGAG CTGGCGTGAAGAGGTGGATGGACGACGAACTCCGAGCCGACCACCACCGGCATG TAGTAATGTAATCCCTTCTTCGTTCCCAGTTCTCCACCGCCTCCATGATCACCCGT AAAACTCCTAAGCCCTATTATTACTACTATTATGTTTAAATGTCTATTATTGCTAT AAAAAAAAAAAAAAAAAAAAAAAAA

#### Figure 7b

ARSSVVEAAPPVAAAANATPALPVVVVDTQEAGIRLVHALLACAEAVQQENLSAAE ALVKQIPLLAASQGGAMRKVAAYFGEALARRVFRFRPQPDSSLLDAAFADLLHAHF YESCPYLKFAHFTANQAILEAFAGCRRVHVVDFGIKQGMQWPALLQALALRPGGPPS FRLTGVGPPQPDETDALQQVGWKLAQFAHTIRVDFQYRGLVAATLADLEPFMLQPE GEEDPNEEPEVIAVNSVFEMHRLLAQPGALEKVLGTVRAVRPRIVTVVEQEANHNSG TFLDRFTESLHYYSTMFDSLEGGSSGGGPSEVSSGAAAAPAAAGTDQVMSEVYLGR QICNVVACEGAERTERHETLGQWRNRLGNAGFETVHLGSNAYKQASTLLALFAGGD GYKVEEKEGCLTLGWHTRPLIATSAWRLAGP

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#### Figure 8a

ATAGAGAGGCGAGGTAGCTCGCGGATCATGAAGCGGGAGTACCAGGACGCCGG AGGGAGCGGCGGCGGTGGCGCATGGGCTCGTCCGAGGACAAGATGATGGT GGTACAAGGTGCGCGCCTCCGACATGGCGGACGTGGCGCAGAAGCTGGAGCAGC TCGAGATGGCCATGGGGATGGGCGCGTGGGCGCCGCCCCCGACGACA GCTTCGCCACCCCCCCCGGACACCGTGCACTACAACCCCACCGACCTGTC GTCTTGGGTCGAGAGCATGCTGTCGGAGCTCAACGCGCCGCCGCCGCCCCTCCCG CCCGCCCGCAGCTCAACGCCTCCACCTCCACCGTCACGGCAGCGGCGGCT ACTTCGATCTCCCGCCCTCCGTCGACTCCTCCAGCAGCATCTACGCGCTGCGGCC GATCCCCTCCCGGCCGGCGCGACGGCCGGCCGACTCCGTG CGGGATCCCAAGCGGATGCGCACTGGCGGGAGCACCTCGTCGTCATCCTCCT CCTCGTCGTCTCTCGGTGGGGGCCCCAGGAGCTCTGTGGTGGAGGCTGCCCCGCC GGTCGCGGCCGGCCAACGCGACGCCCGCGCTCGTCGTCGTCGACAC GCAGGAGGCCGGGATTCGGCTGGTGCACGCGCTGCTGCGCGCGGAGGCCGT GCAGCAGGAGAACCTCTCCGCCGCGGAGGCGCTGGTGAAGCAGATACCCTTGCT GGCCGCGTCCCAGGGCGCGCGATGCGCAAGGTCGCCGCCTACTTCGGCGAGGC GCCGCCTTCGCCGACCTCCTCCACGCGCACTTCTACGAGTCCTGCCCCTACCTCAA GTTCGCGCACTTCACCGCCAACCAGGCCATCCTGGAGGCGTTCGCCGGCTGCCGC CGCGTGCACGTCGACTTCGGCATCAAGCAGGGGATGCAGTGGCCCGCACTTC TCCAGGCCCTCGCCCTCCGTCCGGCGCCCTCCCTCGTTCCGCCTCACCGGCGTC GGCCCCCGCAGCCGACGACGACGCCCTGCAGCAGGTGGGCTGGAAGCTC GCCCAGTTCGCGCACACCATCCGCGTCGACTTCCAGTACCGCGGCCTCGTCGCCG CCACGCTCGCGGACCTGGAGCCGTTCATGCTGCAGCCGGAGGGCGAGGAAGACC CGAACGAGGAGCCCGAGGTAATCGCCGTCAACTCAGTCTTCGAGATGCACCGGC GGCCCAGGATCGTCACCGTGGTGGAGCAGGAGGCGAATCACAACTCCGGCACAT TCCTGGACCGCTTCACCGAGTCTCTGCACTACTACTCCACCATGTTCGATTCCCTC GAGGGCGCAGCTCCGGCGCCCCATCCGAAGTCTCATCGGGGGCTGCTGCT AGATCTGCAACGTGGTGGCCTGCGAGGGGGGGGGGGGCGCACAGAGCGCCACGAGA CGCTGGGCCAGTGGCGGAACCGGCTGGGCAACGCCGGGTTCGAGACCGTCCACC TGGGCTCCAATGCCTACAAGCAGGCGAGCACGCTGCTGGCGCTCTTCGCCGGCGG CGACGCTACAAGGTGGAGGAGAAGGAAGGCTGCCTGACGCTGGGGTGGCACAC GCGCCCGCTGATCGCCACCTCGGCATGGCGCCTGGCCGGGCCGTGATCTCGCGAG TTTTGAACGCTGTAAGTACACATCGTGAGCATGGAGGACAACACAGCCCCGGCG GCCGCCCGGCTCTCCGGCGAACGCACGCACGCACTTGAAGAAGAAGAAG 

#### Figure 8b

MKREYQDAGGSGGGGGGGGSSEDKMMVSAAAGEGEEVDELLAALGYKVRASDM ADVAQKLEQLEMAMGMGGVGAGAAPDDSFATHLATDTVHYNPTDLSSWVESMLS ELNAPPPPLPPAPQLNASTSSTVTGSGGYFDLPPSVDSSSSIYALRPIPSPAGATAPADL SADSVRDPKRMRTGGSSTSSSSSSSSSSSLGGGARSSVVEAAPPVAAAANATPALPVVV VDTQEAGIRLVHALLACAEAVQQENLSAAEALVKQIPLLAASQGGAMRKVAAYFGE ALARRVFRFRPQPDSSLLDAAFADLLHAHFYESCPYLKFAHFTANQAILEAFAGCRR VHVVDFGIKQGMQWPALLQALALRPGGPPSFRLTGVGPPQPDETDALQQVGWKLA QFAHTIRVDFQYRGLVAATLADLEPFMLQPEGEEDPNEEPEVIAVNSVFEMHRLLAQ PGALEKVLGTVRAVRPRIVTVVEQEANHNSGTFLDRFTESLHYYSTMFDSLEGGSSG GGPSEVSSGAAAAPAAAGTDQVMSEVYLGRQICNVVACEGAERTERHETLGQWRN RLGNAGFETVHLGSNAYKQASTLLALFAGGDGYKVEEKEGCLTLGWHTRPLIATSA WRLAGP

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#### Figure 9a

TTTCGCCTGCCGCTGCTATTAATAATTGCCTTCTTGGTTTCCCCGTTTTCGCCCCAG CCGCTTCCCCCTACCCTTTCCTTCCCCACTCGCACTTCCCAACCCTGGAT CCAAATCCCAAGCTATCCCAGAACCGAAACCGAGGCGCGCAAGCCATTATTAGC TGGCTAGCTAGCCTGTAGCTCCGAAATCATGAAGCGCGAGTACCAAGACGCCG GCGGGAGTGGCGCGACATGGGCTCCTCCAAGGACAAGATGATGGCGGCGGCGG CGGGAGCAGGGAACAGGAGGAGGAGGACGTGGATGAGCTGCTGGCCGCGCTC GGGTACAAGGTGCGTTCGTCGGATATGGCGGACGTCGCGCAGAAGCTGGAGCAG CTCGAGATGGCCATGGGGATGGGCGCGTGGGCGCGCCGGCGCTACCGCTGAT GACGGGTTCGTGTCGCACCTCGCCACGGACACCGTGCACTACAATCCCTCCGACC TGTCGTCCTGGGTCGAGAGCATGCTGTCCGAGCTCAACGCGCCCCCAGCGCCGCT CCCGCCGCGACGCCGGCCCCAAGGCTCGCGTCCACATCGTCCACCGTCACAAGT GGCGCCGCCGCTGCTGCTACTTCGATCTCCCGCCGCCGTGGACTCGTCCA GCAGTACCTACGCTCTGAAGCCGATCCCCTCGCCGGTGGCGGCCGTCGGCCGA CCCGTCCACGGACTCGGCGCGGGGGCCCAAGCGGATGAGGACTGGCGGCGGCAG CACGTCGTCCTCCTCGTCGTCGTCATCCATGGATGGCGGTCGCACTAGGAGCT CCGTGGTCGAAGCTGCGCCGCCGGCGACGCAAGCATCCGCGGCGGCCAACGGGC CCGCGGTGCCGGTGGTGGTGGACACGCAGGAGGCCGGGATCCGGCTCGTGC ACGCGCTGCTGCGCGCGGAGGCCGTGCAGCAGGAGAACTTCTCTGCGGCGG AGGCGCTGGTCAAGCAGATCCCCATGCTGGCCTCGTCGCAGGGCGGTGCCATGC GCAAGGTCGCCGCCTACTTCGGCGAGGCGCTTGCCCGCCGCGTGTATCGCTTCCG CCCGCCACCGGACAGCTCCCTCCTCGACGCCGCCTTCGCCGACCTCTTGCACGCG CACTTCTACGAGTCCTGCCCCTACCTGAAGTTCGCCCACTTCACCGCGAACCAGG CCATCTCGAGGCCTTCGCCGGCTGCCGCCGCGTCCACGTCGACTTCGGCAT CAAGCAGGGGATGCAGTGGCCGGCTCTTCTCCAGGCCCTCGCCCTCGCCCTGGC GGCCCCCGTCGTTCCGGCTCACCGGCGTCGGGCCGCCGCAGCCCGACGAGACC GACGCCTTGCAGCAGGTGGGCTGGAAACTTGCCCAGTTCGCGCACACCATCCGCG TGGACTTCCAGTACCGTGGCCTCGTCGCGGCCACGCTCGCCGACCTGGAGCCGTT CATGCTGCAACCGGAGGCGATGACACGGATGACGAGCCCGAGGTGATCGCCGT GAACTCCGTGTTCGAGCTGCACCGGCTTCTTGCGCAGCCCGGTGCCCTCGAGAAG GTCCTGGGCACGGTGCGCGGGTGCGGCCGAGGATCGTGACCGTGGTCGAGCAG GAGGCCAACCACAACTCCGGCACGTTCCTCGACCGCTTCACCGAGTCGCTGCACT ACTACTCCACCATGTTCGATTCTCTCGAGGGCGCCGGCGCCGGCTCCGGCCAGTC CACCGACGCCTCCCCGGCCGCCGCCGCCGCCACGACCAGGTCATGTCGGAGGT GTACCTCGGCCGGCAGATCTGCAACGTGGTGGCGTGCGAGGGCGCGGAGCGCAC GGAGCGCCACGAGACGCTGGGCCAGTGGCGCAGCCGCCTCGGCGCTCCGGGTT CGCGCCCGTGCACCTGGGCTCCAATGCCTACAAGCAGGCGAGCACGCTGCTGGC GCTCTTCGCCGGCGCGACGGGTACAGGGTGGAGGAGAAGGACGGGTGCCTGAC GCCGCCGCTCGTGATCAGGGAGGGGTGGTTGGGGCCTTCTGGACGCCGATCAAG GCACACGTACGTCCCTGGCATGGCGCACCCTCCCTCGAGCTCGCCGGCACGGGT GAAGCTACCCGGGGGATCCACTAATTCTAAAACGGCCCCACCGCGGTGGAACTC CACCTTTTGTTCCCTTTA

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Figure 9b

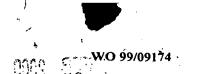
MKREYQDAGGSGGDMGSSKDKMMAAAAGAGEQEEEDVDELLAALGYKVRSSDM ADVAQKLEQLEMAMGMGGVGGAGATADDGFVSHLATDTVHYNPSDLSSWVESML SELNAPPAPLPPATPAPRLASTSSTVTSGAAAGAGYFDLPPAVDSSSSTYALKPIPSPV AAPSADPSTDSAREPKRMRTGGGSTSSSSSSSSSMDGGRTRSSVVEAAPPATQASAAA NGPAVPVVVVDTQEAGIRLVHALLACAEAVQQENFSAAEALVKQIPMLASSQGGAM RKVAAYFGEALARRVYRFRPPPDSSLLDAAFADLLHAHFYESCPYLKFAHFTANQAI LEAFAGCRRVHVVDFGIKQGMQWPALLQALALRPGGPPSFRLTGVGPPQPDETDAL QQVGWKLAQFAHTIRVDFQYRGLVAATLADLEPFMLQPEGDDTDDEPEVIAVNSVF ELHRLLAQPGALEKVLGTVRAVRPRIVTVVEQEANHNSGTFLDRFTESLHYYSTMFD SLEGAGAGSGQSTDASPAAAGGTDQVMSEVYLGRQICNVVACEGAERTERHETLGQ WRSRLGGSGFAPVHLGSNAYKQASTLLALFAGGDGYRVEEKDGCLTLGWHTRPLIA TSAWRVAAAAAP

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20 20 44 20 20 44	115 114 114 93	174 168 171 114	234 225 231 159	294 285 256 219	354 345 256 277	414 405 256 337	473 465 256 392
YKVRSSDMAD YKVRASDMAD YKVRSSDMAD YKVRSSMAD	MLSELNAPPA MLSELNAPPP MLSELNAPPP MLTDLNPP	VAA PSADPS AGATAPADLS VVATADPS AILNQFA	NGPAVPVVVV ATPALPVVVV NAPAVPVVVV AESTRHVVLV	AYFGEALARR AYFGEALARR TYFAEALARR	RRVHVVDFGI RRVHVVDFGI KRVHVFDFSM	HTIRVDFOYR HTIRVDFOYR EAIHVBEEYR	VLGTVRAVRP VLGTVRAVRP VLGVVNQMKP
DVDELLAALG BVDELLAALG DVDELLAALG GMDELLAALG	PSDLSSWVBS PTDLSSWVBS PSDLSSWVBS PABLYTWLDS	TYALKPIPSP IYALRPIPSP TYALRPISLP EYDIKAIPGD	PPATOASAAA PPV. AAAAN PPATOGAAAA NGVVETTTAT	SQGGAMRKVA SQGGAMRKVA SQIGAMRKVA	QAILEAFAGC QAILEAFAGC QAILEAFOGK	QVGWKLAQFA QVGWKLAQFA BVGCKLAHITA	LLAQPGALEK LLAQPGALEK LLGRPGAIDK
AAGAGEQEEE AAAXGEGE AAGEEE	HLATDTVHYN HLATDTVHYN OLATETVHYN	LPPAVDSSSS LPPSVDSSSS LPPAPDSSSS	RTRSSVVBAA ARSSVVBAA ASRGSVVBAA YTTNKRLKCS	LVKOIPHDAS LVKOIPHDAA LVKOIGFLA	YLKFAHFTAN YLKFAHFTAN YLKFAHFTAN	POPDETDALO POPDETDALO PAPDÑFÖYĽH	AVNSVFELHR AVNSVFEMHR AVNSVFELHK
GSSKDKMMAA GSSEDKMMVS GSGKDKWMAG	GATADDGFVS GAARDDSFAT GAADDGFVS	GAAMGAGYFD GSGGYFD GGGSGRFE	SSSSIMDGG SSSSSLGGG SSSSSLGGG SSSSSLGGDT SSSSS	OOENESAAEA OOENLSAAEA OOENF	LHAHFYESCP LHAHFYESCP LOMHFYETCP	PSFRLTGVGP PSFRLTGVGP	DDTDDEPEVI BDPNEBPEVI LRPSEIESW
S G G G S S M D M S G G G S S M D M	AMGMGGVGGA AMGMGGV.GA AMGMGGVSMM	LASTSSTVTS ASTSSTVT HASTSSTVTG	RTGGGSTSSS RTGGGSTSSS RTGGGSTSSS	HALLACAEAV HALLACAEAV HALLACAEAV HALLACAEAV	SLLDAAFADL SLLDAAFADL SPHDHSESDT	QALALRPGGP QALALRPGGP QALALRPGGP	EPFMLOPEG.
MKREYODAGG MKREYODAGG . INPTRPEAGG MKRIMHHE	VAQKLEQLEM VAQKLEQLEM VAQKLEQLEM VAQKLEQLEM	PLPPATPAPR PLPPAPQLN PFPPAPPAR	ADSARMPKRM ADSARDPKRM ADSARDTKRM	DTOBAGIRLV DTOBAGIRLV DTOBAGIRLV DSOBNGWRLV	VYRFRPOPDS V阿RFRPOPDS WYRMSPSQ	KOGMOWPALL KOGMOWPALL SOGMOWPALM	GLVAATLADL GLVAATLADL GENVANTLADL
maiz-fin rht-fina rice-fin gai	maiz-fin rht-fina rice-fin gai	maiz-fin rht-fina rice-fin gai	maiz-fin rht-fina rice-fin gai	maiz-fin rht-fina rice-fin gai	maiz-fin rht-fina rice-fin gai	maiz-fin rht-fina rice-fin gai	maiz-fin rht-fina rice-fin gai

Figure 10 (Continued)

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529 255 434	589 256 494	
A A A A P A A G G T	NAYKQASTLL NAYKOASTLL NAKKOASMLL	
G G G P S E V S G G G P S E V S G G G G G G G G G G G G G G G G G G	SGFAPVHLGS AGFETVHLGS AGFAAAHIGS	630 · 623 · 256 · 532
MFDSLEGAGA	LGOWRSRLGG	SAWRWAAAAA
MFDSLEGGSS	LGOWRNRLGN	SAWRLAGP
进FDSLEGVPS	LSOWRNREGS	SAWRLSTN
FTESLHYYST	GAERTERHET	GWHTRPLIAT
FTESCHYYST	GAERTERHET	GWHTRPLIAT
FTESCHYYST	GPMRVERHET	GWHTRPLIAT
NHNSGTFLDR NHNSGTFLDR NHNSPIFLDR	ROICNVVACE ROICNVVACE	VEEKDGCLTL VEEKMGCLTL VEESDGCLML
RIVTVVEQEA	DOVMSBVYLG	ALFAGGDGYR
RIVTVVEQEA	DOVMSBVYLG	ALFAGGDGYR
EIFTVVEQES	DKVMSBVYLG	ALFNGGRGYR
maiz-fin	maiz-fin	maiz-fin
rht-fina	rht-fina	rht-fina
rice-fin	rice-fin	rice-fin
gai	gai	gai



# Figure 11a

TACCAAGACGCCGGCGGGAGTGGCGGCGACATGGGCTCCTCCAAGGACAAGATG
ATGGCGGCGCGCGGGGAGCAGGGGAACAGGAGGAGGAGGACGTGGATGAGCT
GCTGGCCGCGCTCGGGTACAAGGTGCGTTCGTCGGATATGGCGGGGCTGGAGCA
GCTCGAGATGGCCATGGGGATGGGCGCGCGCGCGCGCGCTGCTGA
TGACGGGTTCGTGTCGCACCTCGCCACGGACACCGTGCACTACAATCCCTCCGAC
CTGTCGTCCTGGGTCGAGAGCATGCTGTCCGA

# Figure 11b

YQDAGGSGGDMGSSKDKMMAAAAGAGEQEEEDVDELLAALGYKVRSSDMAGLEQ LEMAMGMGGVGGAGATADDGFVSHLATDTVHYNPSDLSSWVESMLS

## Figure 11c

## Figure 11d

SSKDKMMAAAAGAGEQEEEDVDELLAALGYKVRSSDMADVAQKLEQLEMAMGM GGVGGAGATADDGFVSHLSSWVESMLSELNAPPAPLPPATPAPRLASTSSTVTSGAA AGAGYFDLPPAVD

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Figure 12a

GCGGCGCTCGGGTACAAGGTGCGCGCCTCCGACATGGCGGACGTGGCGCAGAAG CCCGACGACAGCTTCGCCACCCACCTCGCCACGGACACCGTGCACTACAACCCCA CCGACCTGTCGTCTTGGGTCGAGAGCATGCTGTCGGAGCTCAACGCCTCCACCTC CTCCACCGTCACGGCAGCGGCGCTACTTCGATCTCCCGCCCTCCGTCGACTCC CGGCCGACCTGTCCGCCGACTCCGTGCGGGATCCCAAGCGGATGCGCACTGGCG GGAGCACCTCGTCGTCATCCTCCTCCTCGTC

Figure 12b

AALGYKVRASDMADVAQKLEQLEMAMGMGGVGAGAAPDDSFATHLATDTVHYN PTDLSSWVESMLSELNASTSSTVTGSGGYFDLPPSVDSSSSIYALRPIPSPAGATAPAD LSADSVRDPKRMRTGGSSTSSSSSS